

## CIS 3362 Homework #7

### Crack the Hash Function - Birthday Attack

Please work in pairs and put both people's names on each file submitted!

#### **Find any two unique messages that hash to the same value.**

You will be given a hash function in the file hash.java that returns a 48 bit value in a long. Your goal for this portion of the assignment will be to find two unique strings, s and t, such that f(s) and f(t) are equal.

#### **Deliverables**

- (1) .java file - program that generates the match
- (2) .txt or .docx or .pdf file - written summary of your work

In the second file, if you found two input strings that create the same hash value, state what those two strings are. Then, describe in words your strategy to find that pair. If there were some failed strategies, please describe these as well, though you don't need to submit this code. If your strategy failed please submit the code you have as this is how I will give partial credit and carefully explain all the means you used to attempt to find two matching strings.